

** TX STATUS REPORT **

AS OF MAR 04 '99 09:28 P

00

Note - This was
faxed twice - to be
correct fax #'s - on
3/3/99 & 3/4/99.

MKP

	DATE	TIME	TO/FROM	MODE	MIN/SEC	PGS	CMD#	STA
01	03/04	09:24	703 305 9216	EC-S	04'19"	022	075	OK

1233 20th Street
Suite 501
Washington, D.C. 20036
Telephone (202) 955-3750
Facsimile (202) 955-3751
<http://www.intelprop.com>
info@raderfishman.com

**RADER, FISHMAN &
GRAUER PLLC**

FAX RECEIVED

MAR 04 1998

GROUP 3600

Fax**Official**

FAX room
confirmation
: 305-1427

To: ATTN: Examiner V. Luong

BOX AF / Assistant Commissioner for Patents

United States Patent and Trademark Office

From: Ronald P. Kananen

Fax: (703) 305-7687

Pages: 50 (including this cover page)

Phone: (703) 308-3221

Date: March 4, 1999

Re:

CC:

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

This message is intended only for the use of the individual or entity to which it is addressed, and may contain information that is privileged, confidential and exempt from disclosure under applicable laws. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return original message to us at the above address via U.S. Postal Service. Thank you.

• Comments:

DC020533

PART ① OF 50-page
document

Please deliver immediately to
Examiner Luong. Thank you.

ATS-032/REISSUE
Serial No. 08/629,547

BOX AF
REISSUE APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Reissue Application of

Satoshi Kono et al.

U.S. Patent No. 5,465,635

Reissue Serial No. 08/629,547

Reissue Filed: April 9, 1996

For: FLYWHEEL ASSEMBLY FOR
INTERNAL COMBUSTION ENGINE
(as revised)

Group Art Unit: 3682

Examiner: V. Luong

Official

FAX RECEIVED

MAR 04 1998

GROUP 3600

REQUEST TO WITHDRAW ERRONEOUS NOTICE OF ABANDONMENT

Assistant Commissioner for Patents
Box AF
Washington, D.C. 20231

Sir;

This will acknowledge receipt of a Notice of Abandonment mailed February 25, 1999 in connection with the above-identified reissue application. Please withdraw that Notice of Abandonment and reinstate this reissue application, as indicating a Notice of Abandonment in an allowed application is erroneous. It is believed that no petition fee is required, but if a petition fee is needed, this will authorize charging the deposit account of the undersigned firm, Account No. 18-0013 for such petition fee. This action is taken to overturn an erroneous action by the PTO and is without prejudice to filing a petition to revive as unintentional in the unlikely event that this erroneous Notice of Abandonment is not withdrawn.

ATS-032/REISSUE
Serial No. 08/629,547

BOX AF
REISSUE APPLICATION

The operative facts are as follows:

1. On May 5, 1998, a non-final Office Action was mailed. The Action indicated that the reissue application was in condition for allowance except for the presence of formal matters, so that prosecution on the merits was closed in accordance with the practice under Ex parte Quayle, and the usual two months period was set for reply. The only formal matter requiring attention was the submission of a clean copy of a substitute specification and the claims. A copy of the Action is enclosed as Appendix A.

2. On July 1, 1998, a full and timely response to the non-final Action of May 5, 1998 was filed. It constituted a Transmittal of Substitute Specification. A copy of the transmittal is provided as Appendix B. A copy of the substitute specification itself is not believed to be needed and is not in issue here. This paper constituted a full and timely response to the Action of May 5, 1998.

3. No further Action has been received from the Examiner.

3. On August 31, 1998, a facsimile was received with appreciation from the Examiner transmitting a list of matters requiring attention and correction prior to a Notice of Allowance. A copy of this paper is attached as Appendix C. This paper did not constitute an Action in that it indicated on its face as follows:

Please respond as soon as possible. If I do not receive the response within two weeks from today, I will send you a second Ex parte Quayle Action. Thank you.

4. In the view of the undersigned, this facsimile of August 31, 1998 did not constitute an Action for which a response was required. But even if it did, the response of November 17, 1998 was timely and lacked only a request for a one-month extension of time.

ATS-032/REISSUE
Serial No. 08/629,547

BOX AF
REISSUE APPLICATION

5. On September 10, 1998, the applicant's representative, Mr. Jeffrey Thompson, met with Examiner Luong to be certain that all of the information requested by the Examiner was understood. No mention was made of a time period of any kind then running. A copy of the Interview Summary of September 10, 1998 is attached as Appendix D.

6. On November 17, 1998, a paper captioned "Supplemental Amendment Transmittal" was filed purporting to be responsive to the Examiner's facsimile of August 31, 1998 and the discussions at the interviews of August 31, 1998 and September 10, 1998. It on its face reflects the understanding that no Office Action was then pending requiring a response. A copy of that submission is attached as Appendix E.

7. Withdrawal of the Notice of Abandonment is warranted and indicated in that the Action of May 5, 1998, purportedly not responded to according to the Notice of Abandonment, was in fact fully responded to by the response submitted on July 1, 1998. No other action or paper indicated a time for response was issued. All actions subsequent to the July 1, 1998 response were the result of helpful discussions with the Examiner through interviews and facsimile transmissions fully of record. Accordingly, it is the position of the undersigned that the Notice of Abandonment is erroneous and should be withdrawn.

8. A brief discussion was held today, March 3, 1999, with Examiner Luong and the foregoing facts presented. The Examiner asked that our position be submitted to him promptly

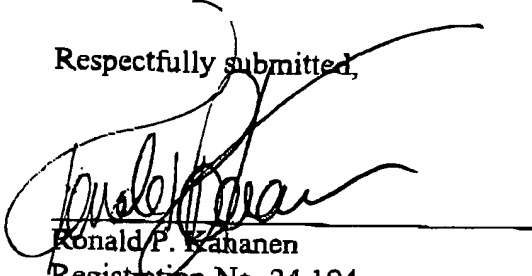
ATS-032/REISSUE
Serial No. 08/629,547

BOX AF
REISSUE APPLICATION

for reconsideration of the Notice of Abandonment and tentatively indicated an agreement with our understanding of the record.

Respectfully submitted,

Dated: March 3, 1998


Ronald P. Kahanen
Registration No. 24,104

RADER, FISHMAN & GRAUER P.L.L.C.
1233 20th Street, N.W., Suite 501
Washington, D.C. 20036
Telephone (202) 955-3750
Facsimile (202) 955-3751

DC020517

APPENDIX A

**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
087629,547	04/09/96	TAKAHASHI	5.5-98 CW ATS-032-CON/

RONALD P KANANEN
MARKS & MURASE
SUITE 750
2001 L STREET NW
WASHINGTON DC 20036

PM31/0505

EXAMINER
LUONG, V

ART UNIT	PAPER NUMBER
3622	

DATE MAILED: 05/05/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

DOCKETED
Due: 7/5/98

8381 8 0 YAM

Office Action Summary

Application No.

08/629,547

Applicant(s)

Takahashi et al.

Examiner

Vinh Luong

Group Art Unit

3622☒ Responsive to communication(s) filed on 2/23/98☐ This action is **FINAL**.☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 2 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims☒ Claim(s) 1-12, 16, 28, and 31 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☒ Claim(s) 1-12, 16, 28, and 31 is/are allowed.☐ Claim(s) _____ is/are rejected.☐ Claim(s) _____ is/are objected to.☐ Claims _____ are subject to restriction or election requirement.**Application Papers**☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.☐ The drawing(s) filed on _____ is/are objected to by the Examiner.☒ The proposed drawing correction, filed on 7/22 & 5/20/1997 is ☒ approved ☐ disapproved.☐ The specification is objected to by the Examiner.☐ The oath or declaration is objected to by the Examiner.**Priority under 35 U.S.C. § 119**☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☒ received in Application No. (Series Code/Serial Number) 07/485,659☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).**Attachment(s)**☐ Notice of References Cited, PTO-892☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____☐ Interview Summary, PTO-413☐ Notice of Draftsperson's Patent Drawing Review, PTO-948☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Serial Number: 08/629,547

Page 2

Art Unit: 3622

1. The Amendment after Final filed on February 23, 1998 has been entered.
2. Claims 1-12, 16, 28, and 31 are allowed.
3. The interlineations or cancellations made in the specification or amendments to the claims could lead to confusion and mistake during the issue and printing processes. Accordingly, the portion of the specification or claims as identified below is required to be rewritten before passing the case to issue. See 37 C.F.R. 1.125 and M.P.E.P. § 608.01(q).

The entire specification and all of the allowed claims are required to be rewritten.

4. Note that the substitute specification is required pursuant to 37 C.F.R. 1.125(a) because the number or nature of applicant's amendments render it difficult to consider the application or to arrange the papers for printing or copying. 37 C.F.R. 1.125. *A substitute specification filed under 37 C.F.R. 1.125(a) must only contain subject matter from the original specification and any previously entered amendment under 37 C.F.R. 1.121.* If the substitute specification contains additional subject matter not of record, the substitute specification must be filed under 37 C.F.R. 1.125(b) and must be accompanied by: 1) a statement that the substitute specification contains no new matter, and 2) a marked-up copy showing the amendments to be made via the substitute specification relative to the specification at the time the substitute specification is filed.

5. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on July 22, 1997 and May 20, 1997 have been approved. Applicant is reminded that the Patent and Trademark Office no longer makes drawing changes and that it is applicant's responsibility to ensure

Serial Number: 08/629,547

Page 3

Art Unit: 3622

that the drawings are corrected in accordance with the instructions set forth in Paper No. 4, mailed on October 24, 1996.

6. This application is in condition for allowance except for the following formal matters: a clean copy of the substitute specification and allowed claims is required. Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213. A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

7. Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (703) 305-3597. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see M.P.E.P. 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check. Responses submitted by facsimile transmission should include a Certificate of Transmission (M.P.E.P. 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 305-3597) on _____

(Date)

Typed or printed name of person signing this certificate:

(Signature)

Serial Number: 08/629,547

Page 4

Art Unit: 3622

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 C.F.R. 1.4 and M.P.E.P. 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to whose telephone number is (703) 308-3221. The examiner can normally be reached on Monday-Thursday from 7:30 AM EST to 6:00 PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor, can be reached on (703) 308-0830. The fax phone number for this Group is (703) 305-3597 or (703) 305-3598.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

Luong

April 28, 1998

VINH T. LUONG
PRIMARY EXAMINER
ART UNIT 352

APPENDIX B

Docket No.: ATS-032/REISSUE 80018.012
Re: 08/629,547 of KONO et al.

<input type="checkbox"/>	Decl. of Use	\$8	\$15	DATE & RETURN
<input type="checkbox"/>	TM Renewal		Main. Fee	
<input type="checkbox"/>	Assignment		Sm. Entity Decl	
<input type="checkbox"/>	Issue Fee	JUL - 1 1998	Discl. Statement	
<input type="checkbox"/>	Amendment		Check for	\$
<input type="checkbox"/>	New Appln.		Declaration	
<input type="checkbox"/>	Pgs. Spec.		Sht. Drwg.	Claims
<input type="checkbox"/>	Cert. Copy of			
<input checked="" type="checkbox"/>	Substitute Specification and Transmittal			
Due: 07/05/98				
Initial: RPK:JLT:JFH				
Other:				
VIA: Courier <input checked="" type="checkbox"/> Mail <input type="checkbox"/>				

ATS-032/REISSUE

BOX AF
REISSUE APPLICATIONIN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Reissue Application of)	
)	
SATOSHI KONO et al.)	
)	
U.S. Patent No. 5,465,635)	Group Art Unit: 3502
)	
Reissue Serial No. 08/629,547)	Examiner: V. Luong
)	
Reissue Filed: April 9, 1996)	
)	
For: FLYWHEEL ASSEMBLY FOR)	
INTERNAL COMBUSTION ENGINE)	
(as revised))	

TRANSMITTAL OF SUBSTITUTE SPECIFICATION

Assistant Commissioner for Patents
Box AF
Washington, D.C. 20231

Sir:

Attached hereto is a Substitute Specification, as requested by the Examiner on page 2 of the Office Action under Ex parte Quayle mailed May 5, 1998 (Paper No. 18). This Substitute Specification incorporates all of the changes made in the original reissue specification, the Second Supplemental Amendment filed on July 22, 1997, and the Amendment After Final filed on February 23, 1998. This Substitute Specification does not introduce any changes other than those previously entered by the Examiner.


Serial No. 08/629,547
Docket No. ATS-032/REISSUE

REISSUE APPLICATION

Prompt issuance of a Notice of Allowance is now respectfully requested.

Respectfully submitted,

Dated: July 1, 1998



Ronald P. Kananen
Registration No. 24,104

RADER, FISHMAN & GRAUER PLLC
1233 Twentieth Street, N.W.
Suite 501
Washington, D.C. 20036
Telephone (202) 955-3750
Facsimile (202) 955-3751

Dc010821

APPENDIX C



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
PATENTS AND TRADEMARKS
Washington, D.C. 20231

Group 3500
Facsimile Transmission

Serial No.: OR/629,547

Date: 8/31/98

Paper No. (if any): 23

Accy. Dkt. No.
(if any): ATS 032-CON/

To: MR RONALD P. KANANEN

Firm or corporation: RADER, FISHMAN & RAUER

Fax Number: (802) 955-3751

Number of pages including cover sheet: 4

From: EXAMINER LUONG

Art Unit: 3622

Telephone Number: (703) 308 - 3221

Group facsimile numbers: (703) 305-3597 or 3598.


Group receptionist number: (703) 308-2168.

Remarks: PLEASE RESPOND AS SOON AS POSSIBLE
IF I DID NOT RECEIVE THE RESPONSE WITHIN TWO
WEEKS FROM TODAY I WILL SEND YOU A SECOND
EX PARTE QUARE ACTION. THANK YOU.

CONFIDENTIALITY NOTICE

This facsimile is intended ONLY for the use of the individual to whom it is addressed and may contain information that is confidential, and exempt from disclosure under applicable law. This information is protected against willful and unlawful concealment, reproduction, obliteration or destruction under 18 U.S.C. 2071. If the recipient of this information is not the intended recipient or the employee of the intended recipient, you are hereby notified that any disclosure, copying, distribution, destruction or retention of this information is prohibited. If you have received this communication in error, please notify the U.S. Patent & Trademark Office, Group 3500 at the address above and return the original facsimile to us at the above address.

Interview Summary

Application No. 08/629,547	Applicant(s) Takahashi et al.	
Examiner Vinh Luong	Group Art Unit 3622	

All participants (applicant, applicant's representative, PTO personnel):

(1) Vinh Luong (3) _____
(2) Ronald P. Kananen (4) _____

Date of Interview 8/31/98

Type: ☒ Telephonic ☐ Personal (copy is given to ☐ applicant ☐ applicant's representative).

Exhibit shown or demonstration conducted: ☐ Yes ☒ No. If yes, brief description:

Agreement ☒ was reached. ☐ was not reached.

Claim(s) discussed: 5 and 6.

Identification of prior art discussed:

None.

Description of the general nature of what was agreed to if an agreement was reached, or any other comments:

The examiner informed the applicant about the issues to be considered and corrected prior to allowance as seen in the attached list faxed to applicant on August 31, 1998. Applicant agreed to consider these issues and file necessary documentation and response.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

1. ☒ It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph above has been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a response to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW.

2. ☐ Since the Examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the interview unless box 1 above is also checked.

Examiner Note: You must sign and stamp this form unless it is an attachment to a signed Office action.

VINH LUONG
PRIMARY EXAMINER
ART UNIT 3622

Application/Control Number: 08/629,547

Page 2

Art Unit: 3622

ISSUES TO BE CONSIDERED & CORRECTED PRIOR TO ALLOWANCE.

1. Submit a certificate under 37 C.F.R. 3.73(b). See M.P.E.P. 324 and 1410.01.
2. Correct the errors in the substitute claims in Paper No. 21 filed on July 1, 1998:
 - (a) claim 5, line 21, the comma should be underlined; and
 - (b) claim 6:
 - (1) line 4, "which" (original claim language) has not been included in the claim. If it is to be deleted, it should be enclosed in square brackets. If it is to remain in the claim, it should be reinserted without markings of any kind since it was in the original claim. Note that inserting words by red ink is no longer permitted; and
 - (2) line 6, "engageable" should be enclosed in square brackets, and "engaging" should be inserted. This amendment was made at many other places in the claims and should be made here to avoid 35 USC 112 problems and for consistency.
3. A new supplemental declaration must be submitted to cover the amendment after final filed on February 23, 1998 (Paper No. 15). In the first full paragraph on page 6 of Paper No. 15, applicant indicated that applicant would submit the supplemental declaration, however, it has not been received.
4. There is no reference to the basis in the original disclosure for each amendment when originally submitted as required under 37 C.F.R. 1.175(b)(2)(iii). Applicant should provide the basis in his Supplemental Response/Amendment prior to allowance.

Application/Control Number: 08/629,547

Page 3

Art Unit: 3622

5. The reissue declarations (original and supplemental) do not provide the residence, post office address, and country of citizenship of each inventor as required by 37 C.F.R. 1.63(a)(3) and 1.175(c). The new supplemental declaration mentioned by applicant in Paper No. 15 should include this information.

Luong

August 31, 1998

APPENDIX D

Interview Summary	Application No. 08/629,547	Applicant(s) Takahashi et al.	
	Examiner Vinh Luong	Group Art Unit 3622	

All participants (applicant, applicant's representative, PTO personnel):

(1) Vinh Luong (3) _____

(2) Jeffrey Thompson (Reg. No. 37,025) (4) _____

Date of Interview 9/10/98

Type: ☐ Telephonic ☒ Personal (copy is given to ☐ applicant ☒ applicant's representative).

Exhibit shown or demonstration conducted: ☐ Yes ☒ No. If yes, brief description:

Agreement ☒ was reached. ☐ was not reached.

Claim(s) discussed: all of the pending claims.

Identification of prior art discussed:
None.

Description of the general nature of what was agreed to if an agreement was reached, or any other comments:
The examiner showed to the applicant a certificate under 37 CFR 3.73(b) in MPEP 324. Applicant agreed to submit the necessary papers required in the interview summary on August 31, 1998.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

1. ☒ It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph above has been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a response to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW.

2. ☐ Since the Examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the interview unless box 1 above is also checked.

**VINH LUONG
PRIMARY EXAMINER
ART UNIT 3622**

Examiner Note: You must sign and stamp this form unless it is an attachment to a signed Office action.

1233 20th Street
Suite 501
Washington, D.C. 20036
Telephone (202) 955-3750
Facsimile (202) 955-3751
<http://www.intelprop.com>
info@raderfishman.com

**RADER, FISHMAN &
GRAUER PLLC**

FAX RECEIVED

MAR 04 1998

GROUP 3600

Official

Fax

To: ATTN: Examiner V. Luong

BOX AF / Assistant Commissioner for Patents

United States Patent and Trademark Office

From: Ronald P. Kananen

Fax: (703) 305-7687

Pages: 50 (including this cover page)

Phone:

Date: March 4, 1999

Re:

CC:

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

This message is intended only for the use of the individual or entity to which it is addressed, and may contain information that is privileged, confidential and exempt from disclosure under applicable laws. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return original message to us at the above address via U.S. Postal Service. Thank you.

• Comments:

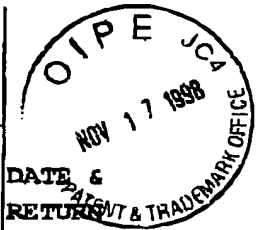
DC020533

PART (2) OF 50-PAGE
DOCUMENT

Please deliver immediately to
Examiner Luong. Thank you.

APPENDIX E

Docket No. ATS-032/REISSUE File No. 80018.012
 Re: Satoshi KONO, et al. For: "FLYWHEEL
 ASSEMBLY FOR INTERNAL COMBUSTION ENGINE"
 Reissue Serial No. 08/629,547



_____	Decl. of Use	_____ \$8	_____ \$15
_____	TM Renewal	_____	Main. Fee
_____	Assignment	_____	Sm. Entity Decl
_____	Issue Fee	_____	Discl. Statement
<u> X </u>	Amendment	_____	Check for \$
_____	New Appln.	_____	Declaration
_____	Pgs. Spec.	_____	Sht. Drwg. Claims
_____	Cert. Copy of	<u> X </u>	<u>Substitute Pages</u>
<u> X </u>	Second Suppl. Reissue Declaration	_____	_____
<u> X </u>	Certificate Under 37 CFR 3.73(b)	_____	_____
Due:	DA \$	Initial:	RPK:mkp
VIA:	Courier <u> X </u>	Mail	Other:

DC016170

BOX AF
REISSUE APPLICATION

In re Application of:

Docket No. ATS-032/REISSUE

Satoshi KONO, et al.

U.S. Patent No. 5,465,635

Examiner: V. Luong

Reissue Serial No. 08/629,547

Group Art Unit: 3622

Reissue Filed: April 9, 1996

FAX RECEIVEDFor: FLYWHEEL ASSEMBLY FOR
INTERNAL COMBUSTION ENGINE
(as revised)

Date: November 17, 1998

MAR 04 1998

GROUP 3600ASSISTANT COMMISSIONER FOR PATENTS
Box AF
Washington, D.C. 20231

Official

Sir:

Transmitted herewith is an amendment in the above-identified application.

☒ No additional fee is required.

The fee has been calculated as shown below

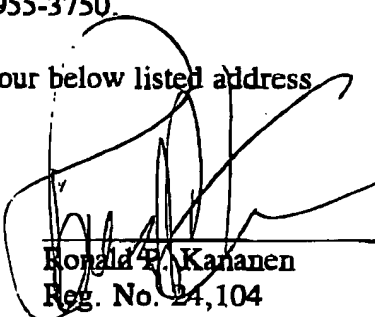
CLAIMS AS AMENDED						
	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NO. PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDITIONAL FEE
TOTAL CLAIMS	15	MINUS	46	=0	x \$11 \$22	0
INDEP. CLAIMS	5	MINUS	8	=0	x \$41 \$82	0
Fee for Multiple Dependent Claims \$135/\$270						
			TOTAL ADDITIONAL FEE FOR THIS AMENDMENT		0	

- * If the entry in Column 2 is less than the entry in Column 4, write "0" in Column 5.
- ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, write "20" in this space.
- *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, write "3" in this space.

- ☐ A Letter to the Official Draftsperson is enclosed.
- ☐ A Change of Address is enclosed.
- ☐ Charge \$ _____ to Deposit Account No. 18-0013. A duplicate copy of this sheet is enclosed.
- ☒ Any prior general authorization to charge an issue fee under 37 C.F.R. 1.18 to Deposit Account No. 18-0013 is hereby revoked. The Commissioner is hereby authorized to charge any additional fees under 37 CFR 1.16 and 1.17 which may be required during the entire pendency of this application, or to credit any overpayment, to Deposit Account No. 18-0013. A duplicate copy of this sheet is enclosed.
- ☐ Charge \$ _____ to Deposit Account No. 18-0013 to cover the Extension fee for response within _____ month(s).
- ☒ Applicant's undersigned attorney may be reached by telephone in our Washington D.C. Office at

(202) 955-3750.

All correspondence should be directed to our below listed address



Ronald F. Kananen
Reg. No. 24,104

RADER, FISHMAN & GRAUER PLLC
1233 20TH Street, N.W., Suite 501
Washington, DC 20036
Telephone: (202) 955-3750
Facsimile: (202) 955-3751

ATS-032/REISSUE

BOX AF
REISSUE APPLICATIONIN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Reissue Application of)	
)	
SATOSHI KONO et al.)	
)	
U.S. Patent No. 5,465,635)	Group Art Unit: 3622
)	
Reissue Serial No. 08/629,547)	Examiner: V. Luong
)	
Reissue Filed: April 9, 1996)	
)	
For: FLYWHEEL ASSEMBLY FOR)	
INTERNAL COMBUSTION ENGINE)	
(as revised))	

SUPPLEMENTAL AMENDMENT AFTER FINAL

Assistant Commissioner for Patents
Box AF
Washington, D.C. 20231

Sir:

In response to the Examiner's facsimile transmission dated August 31, 1998, and the interviews between the Examiner and the Applicant's representatives on August 31 and September 10, 1998, it is respectfully requested that the above-referenced reissue application be further amended as follows:

IN THE SUBSTITUTE CLAIMS:

Please amend/correct the errors in the substitute claims filed on July 1, 1998, as follows (a copy of substitute pages 8, 9 and 10 with these changes incorporated therein is attached):

Docket No. ATS-032/REISSUE
Serial No. 08/629,547

REISSUE APPLICATION

Claim 3, line 2, change "engageable" into --engaging [engageable]--.

Claim 5, line 21, underline the comma.

Claim 6, line 4, reinsert the term "which" before "faces";

line 6, change "engageable" into --engaging [engageable]--.

REMARKS

This is in response to the fax communication from the Examiner dated August 31, 1998, and the interviews with the Examiner on August 31 and September 10, 1998. Entry of the foregoing amendments and corrections are respectfully requested.

By the foregoing amendment, claims 3, 5 and 6 have been amended or corrected. Claims 1 to 12, 16, 28 and 31 remain pending in this reissue application. Claims 13 to 15, 17 to 27 and 32 to 42 were previously canceled.

The amendments and corrections stated above were requested by the Examiner on page 2 of the August 31, 1998, fax communication. These amendments and corrections are incorporated into the substitute pages 8, 9 and 10 attached to the end of this response, which provide the entire text of the claims being amended and corrected.

A Certificate Under 37 C.F.R. 3.73(b) is also being filed herewith, as requested by the Examiner, to show the chain of title from the inventors to the current assignee, Unisia Jecs Corporation. The information shown in the Certificate Under 37 C.F.R. 3.73(b) was previously

Docket No. ATS-032/REISSUE
Serial No. 08/629,547

REISSUE APPLICATION

available in the PTO file for this application, and in the Abstract of Title requested in the original reissue application papers.

A Second Supplemental Reissue Declaration is being filed herewith to cover the changes made in the Amendment After Final filed on February 23, 1998, and the further changes made in this Supplemental Amendment After Final. The Second Supplemental Reissue Declaration also provides the residence, post office address, and country of citizenship of each inventor, as requested by the Examiner.

It is respectfully submitted that each amendment made to the issued patent through this reissue application has a basis in the original disclosure. To the extent that reference has not already been made to the basis in the original disclosure for each amendment, the following additional remarks are provided. For convenience, all references to the specification below are to the page and line numbers that appear in the substitute specification filed on July 1, 1998. The identified portions of the substitute specification have corresponding portions in the specification of the original patent application.

With respect to the change in the title of the invention and in the preamble of the claims, the terms "flywheel" and "flywheel assembly" were used throughout the original specification and claims of this application (e.g., page 1, line 11, page 4A, line 1, and claim 9, line 1). The preamble of claims 1 to 8 of the issued patent recited a "flywheel," while the preamble of claims 9 to 12 recited a "flywheel assembly." Since all of the claims as amended are directed to a flywheel assembly rather than a crankshaft assembly, the title was changed to be consistent with the claimed subject matter. Similar changes were made on page 3B, line 1, and

Docket No. ATS-032/REISSUE
Serial No. 08/629,547

REISSUE APPLICATION

page 6, line 29, of the substitute specification to change "crankshaft assembly" into --flywheel assembly." Similar changes were also made to the preamble of claims 1 to 8 to change "flywheel" into --flywheel assembly" for consistency throughout the claims.

The editorial changes made on page 3A, line 37, and page 5, line 2, of the substitute specification were to correct obvious informalities that occurred during printing by the Patent & Trademark Office.

The phrases "of this example" and "in this example" were inserted on page 3B, lines 9, 20 and 22-23, for grammatical clarity. The basis for these changes is that two embodiments or examples were disclosed in the original application (e.g., page 3B, line 5, and page 6, line 30). These changes are editorial in nature and do not change the substance of the disclosure.

The basis for the elastic plate being fixed "at its inner portion 2f" to one "shaft" end of the crankshaft 1, as recited on page 3B, line 10, of the substitute specification, is found in original Fig. 1 of the drawings and can be implied from the specification at page 3B, lines 9 to 11. The inner portion 2f of the elastic plate 2 is clearly shown in Fig. 1 of the original drawings as being fixed to the shaft end of the crankshaft 1 by bolts 3.

The changes made on page 3B, lines 11 to 14, were made for clarity and to provide proper antecedent basis for the claimed subject matter. The elastic plate 2 has an outer peripheral portion 2b, as shown in Fig. 1 of the drawings and stated in the specification at page 3B, lines 11 to 13. The outer peripheral portion 2b is formed with an axially extending "flange" 2a, as shown in Fig. 1 and implied from the specification at page 3B, line 13. The phrase "is

Docket No. ATS-032/REISSUE
Serial No. 08/629,547

REISSUE APPLICATION

formed at its" has been deleted for clarity since this phrase implies that antecedent basis has already been given for the outer peripheral portion. The term "edge" has been deleted in line 12 to help distinguish the outer peripheral portion 2b of the elastic plate 2 from the outer peripheral edge portion of the reinforcing member 4. The term "section" has been changed to --flange-- in line 13 to more clearly reference the axially extending flange 2a shown in Fig. 1. All of these changes are essentially editorial in nature and have a basis in Fig. 1 of the original drawings and in the portions of the specification identified above.

The changes made on page 3B, lines 20 to 26, were also made for clarity and to provide proper antecedent basis for the claimed subject matter. The "received portion" 4a recited in line 20 is described as being cylindrical and was referred to in the original specification as a "cylindrical section 4a." The "outwardly extending flange 4b" recited in lines 23 to 24 is clearly shown in Fig. 1 and implied in the specification at page 3B, lines 23 to 24. The inner portion 2f of the elastic plate 2 being clamped between the reinforcing member 4 and the shaft end of the crankshaft 1, as recited in lines 25 to 26, is also clearly shown in Fig. 1 and implied in the specification at page 3B, lines 17 to 18. Thus, all of these changes have a basis in Fig. 1 of the original drawings and can be implied from the specification.

The changes made to page 4A were also made for clarity and to provide proper antecedent basis for the claimed subject matter. The term "edge" was deleted on page 4A, line 2, for consistency with the change made on page 3B, line 12. The "inner portion 5h" of the flywheel body 5, as recited on page 4A, line 6, is clearly shown in Fig. 1 and was referred to in the original disclosure as a "stepped inner peripheral edge surface" (page 4A, lines 6 to 7), which

Docket No. ATS-032/REISSUE
Serial No. 08/629,547

REISSUE APPLICATION

implies essentially the same structure. The phrase "central mounting hole 5b" in line 7 stems from the phrase "mounting opening 5b" in the original disclosure (page 4A, line 7), which implies essentially the same structure. The central mounting hole 5b is clearly shown in Fig. 1 of the drawings. The "cylindrical received portion 4a" recited on page 4A, line 8, is based on the corresponding change made on page 3B, line 20. The inner peripheral surface of the flywheel body 5 being "stepped," as recited on page 4A, lines 9 to 10, has a basis in the original text of this same sentence. The first, second, and third surface sections 5c, 5d, and 5e recited on page 4A, lines 10 to 13, are clearly shown in Fig. 1 of the drawings. This change is editorial in nature. The cylindrical received portion 4a being "axially extending," as recited on page 4A, lines 14 and 15, is supported by the original term "axial section 4a" in line 14, as well as Fig. 1 of the drawings. The term "radial outward flange 4b" recited on page 4A, line 17, is based on the corresponding change made on page 3B, lines 23 to 24. The term "predetermined clearance 10" recited on page 4A, lines 19 to 20, is supported by the original term "predetermined distance" in this same sentence, as well as Fig. 1 of the drawings. The term "predetermined clearance 11" recited on page 4A, line 24, is supported by the original term "predetermined distance" in this same sentence, as well as Fig. 1 of the drawings. The term "flywheel body 5" on page 4A, lines 20 to 21 and 22, is supported by the original text on page 4A, line 1. The term "radially extending first side surface 5f" recited on page 4A, lines 21 to 22, was added for clarity and is supported by the original text of this same sentence and Fig. 1 of the original drawings. The term "radially extending side surface 5g," as recited on page 4A, lines 26 to 27 and 28 to 29, was added as an editorial change for consistency in describing the side surfaces 5f, 5g of the flywheel

Docket No. ATS-032/REISSUE
Serial No. 08/629,547

REISSUE APPLICATION

body 5. The radially extending side surface 5g being "an engaging surface," as recited on page 4A, line 29, has a basis in the original text which describes the surface 5g as being engageable with the clutch facing 8 (e.g., page 4A, lines 29 to 30), and also in Fig. 1 of the drawings which shows the surface 5g engaged with the clutch facing 8. Therefore, all of the changes shown on page 4A of the substitute specification are either editorial in nature or have a basis in the text or drawings of the original disclosure.

The term "radial surface 5g" has been changed to --radial engaging surface 5g" throughout the specification and claims following the change made on page 4A, line 29. As stated above, this change has a basis in the original text which describes the surface 5g as being engageable with the clutch facing 8 (e.g., page 4A, lines 29 to 30), and also in Fig. 1 of the drawings.

Claim 1 was amended to delete the phrase "to a driven unit" and to add the phrase "through said flywheel assembly." These changes are supported by the original specification and drawings, which make clear that engine torque is transmitted from the crankshaft 1 through the flywheel assembly to the clutch disc 9 (see page 4B, first paragraph, and Fig. 1).

Claim 5 has been amended to claim that the "cylindrical portion of said reinforcing member is sized to allow" the first portion of the flywheel body "to slide" axially. These changes are supported by the original claim 1 which recites that the flywheel body is slidably mounted, and also by the specification which recites that the cylindrical portion 4a of the reinforcing member 4 is "in a slidable contact" with the flywheel body (page 4A, lines 15 to 17), and that the reinforcing member 4 allows "axial movement of the flywheel" body 5 (page 4A,

Docket No. ATS-032/REISSUE
Serial No. 08/629,547

REISSUE APPLICATION

lines 20 to 21).

Claim 6 has been amended to change "elastic plate" into --flywheel body--. This amendment has a basis in the specification at page 4A, lines 5 to 25, and in Fig. 1 of the drawings.

Claim 9 has been amended to change "elastic member" into --elastic plate--. This change is consistent with the terminology in the specification at page 3B, line 8, which refers to the elastic plate 2. Claim 9 has also been amended to change the term "driving shaft" into --crankshaft--. This change is consistent with the terminology in the specification at page 3B, lines 9 and 10. Claim 9 has also been amended to change the term "flywheel member" into --flywheel body--. This change is consistent with the terminology in the specification at page 4A, line 1. Claim 9 was also amended to change the terms "first end" and "second end" into --first member end-- and --second member end--. These changes were made to clarify that the ends of the reinforcing member 4 are being recited in the claim, which is clear from Fig. 1 of the drawings. Similar changes were made throughout dependent claims 10 to 12 for consistency. These changes have the same basis in the original disclosure as the corresponding changes made to claim 9.

Claim 11 was further amended to change "flanges" into --flange--. This editorial change was made to clarify a grammatical informality. Support for this change can be found in the specification on page 4A, lines 14 to 25.

New claims 16 and 31 each recite that "said elastic plate is clamped axially between said reinforcing member and said shaft end of said crankshaft." This feature of the

Docket No. ATS-032/REISSUE
Serial No. 08/629,547

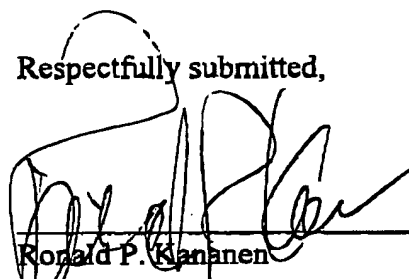
REISSUE APPLICATION

Applicants' invention is shown in Fig. 1 where the elastic plate 2 is clamped axially between the reinforcing member 4 and the shaft end of the crankshaft 1. Support for this feature is also found in the specification at page 3B, lines 17 to 18. The remaining portions of these claims 16 and 31 have a basis in the corresponding portions of the Applicants' original claims, as well as throughout the original specification and drawings. New claim 28 has substantially the same text as the Applicants' original claim 3.

For at least these reasons, it is respectfully submitted that this reissue application is now in condition for allowance. Early issuance of a Notice of Allowance is respectfully requested.

If the Examiner has any questions or comments that could place this application into even better form, he is encouraged to contact the Applicants' undersigned representative at the number listed below.

Respectfully submitted,



Ronald P. Kananen
Registration No. 24,104

Dated: November 17, 1998

RADER, FISHMAN & GRAUER P.L.L.C.
1233 20th Street, N.W.
Suite 501
Washington, D.C. 20036
Telephone (202) 955-3750
Facsimile (202) 955-3751

DC016164

8

1. A flywheel assembly for a power transmission system for transmitting engine torque [to a driven unit], comprising:

5 an elastic plate secured to a crankshaft to rotate therewith;

a flywheel body secured to said elastic plate and having an engaging [engageable] surface for engaging with a clutch disc; and

10 a reinforcing member for reinforcing said elastic plate at a portion of said elastic plate which is secured to said crankshaft;

said elastic plate having an axial rigidity in the range of 600 kg/mm to 2200 kg/mm so as to ensure transmission of engine torque through said flywheel assembly [to said driven unit] while decreasing noise produced by a bending vibration of said crankshaft;

wherein each of said elastic plate, said flywheel body and said reinforcing member comprises a first portion, said first portion of said flywheel body being placed axially between said first portions of said elastic plate and said reinforcing member, and said first portions of said elastic plate, said flywheel body and said reinforcing member defining clearances for allowing said first portion of said flywheel body to move axially between said first portions of said elastic plate and said reinforcing member.

2. A flywheel assembly as set forth in claim 1, wherein said axial rigidity is in the range of 600 kg/mm to 1700 kg/mm.

30 3. A flywheel assembly as set forth in claim 2, wherein an axial run-out of said engaging [engageable] surface when rotated by said crankshaft is no more than 0.1 mm.

4. A flywheel assembly according to claim 1, wherein
said reinforcing member (4) and said elastic plate (2) are
fastened to said crankshaft (1) by a fastening means (3), and
said elastic plate is clamped between said crankshaft and said
5 reinforcing member.

5. A flywheel assembly according to claim 4, wherein
said elastic plate is circular and comprises an outer peripheral
portion (2b) surrounding said first portion of said elastic plate,
10 so that said first portion of said elastic plate is an inner portion
of said elastic plate, said flywheel body comprises an outer
peripheral portion (5a) which surrounds said first portion of
said flywheel body, so that said first portion of said flywheel
body is an inner portion of said flywheel body, said outer
15 peripheral portions of said elastic plate and said flywheel body
are fastened together by a second fastening means (6), said
inner portion of said flywheel body comprises an inwardly
facing inside cylindrical surface defining a central circular hole
(5b), said reinforcing member comprises a cylindrical portion
20 (4a) which is received in said circular hole (5b) of said
flywheel body, and comprises an outwardly facing outside
cylindrical surface surrounded by said inwardly facing
cylindrical surface of said flywheel body, said first portion of
said reinforcing member is in the form of an outward flange
25 (4b), said first portion of said flywheel body is [slidably]
mounted on said cylindrical portion of said reinforcing member
[so that], and said cylindrical portion of said reinforcing
member is sized to allow said first portion of said flywheel
body [is] to slide axially [slidable] between said inner portion
30 of said elastic plate and said outward flange of said reinforcing
member.

6. A flywheel assembly according to claim 4, wherein said inner portion of said flywheel body comprises a first surface (5f) which is substantially parallel to said engaging [engageable] surface (5g) and which faces toward said elastic plate, and a second surface (5d) which is substantially parallel to said engaging [engageable] surface and which faces toward said outward flange of said reinforcing member, said inner portion of said elastic plate comprising an abutting surface confronting said first surface of said flywheel body and limiting an axial movement of said inner portion of said flywheel body [elastic plate] by abutting against said first surface of said flywheel body, said outward flange of said reinforcing member comprises an abutting surface confronting said second surface of said flywheel body and limiting the axial movement of said inner portion of said flywheel body by abutting against said second surface of said flywheel body, an axial distance between said first and second surfaces of said flywheel body is smaller than an axial distance between said abutting surfaces of said elastic member and said reinforcing member.

7. A flywheel assembly according to claim 6, wherein said second surface (5d) of said inner portion of said flywheel body is located axially between said first surface (5f) and said engaging [engageable] surface (5g) of said flywheel body.

8. A flywheel assembly for a power transmission system for transmitting engine torque [to a driven unit], comprising:

an elastic plate secured to a crankshaft to rotate therewith;

a flywheel body secured to said elastic plate and having an engaging [engageable] surface for engaging with a clutch

ATS-032/REISSUE

BOX AF
REISSUE APPLICATIONIN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Reissue Application of)

SATOSHI KONO et al.)

U.S. Patent No. 5,465,635)

Group Art Unit: 3622

Reissue Serial No. 08/629,547)

Examiner: V. Luong

Reissue Filed: April 9, 1996)

For: FLYWHEEL ASSEMBLY FOR
INTERNAL COMBUSTION ENGINE
(as revised))SECOND SUPPLEMENTAL REISSUE DECLARATIONAssistant Commissioner for Patents
Box AF
Washington, D.C. 20231

Sir:

As a below named inventor, I hereby declare that:

1. My residence, post office address, and citizenship are as stated below next to my name, I believe I am an original, first and joint inventor of the subject matter that is described and claimed in letters patent number 5,465,635, granted on November 14, 1995, and in the subject matter in the amendment filed on February 23, 1998, and the amendment filed herewith, and for which invention I solicit a reissue patent.

Docket No. ATS-032/REISSUE
Serial No. 08/629,547

REISSUE APPLICATION

2. I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, I acknowledge the duty to disclose information that is material to the examination of this application, namely, information where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent.

3. I verily believe the original patent to be partly or wholly inoperative or invalid by reason of the patentee claiming more or less than the patentee had a right to claim in the patent (37 C.F.R. 1.175(a)(1)).

4. That all errors that are being corrected in this reissue application, up to the time of filing of this second supplemental reissue declaration, arose without any deceptive intention on the part of the applicant (37 C.F.R. 1.175(a)(2)).

5. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Docket No. ATS-032/REISSUE
Serial No. 08/629,547

REISSUE APPLICATION

SK 10/22/1998
Date: 10/22/1998
~~20/10/1998~~

By:

Satoshi Kono
Satoshi Kono
Country of Citizenship: Japan
Residence: Kanagawa, Japan
Post Office Address: c/o Unisia Jecs Corporation
1370 Onna, Atsugi-Shi
Kanagawa-Ken 243 Japan

Date: 11/01/1998

By:

Shizuaki Hidaka
Shizuaki Hidaka
Country of Citizenship: Japan
Residence: Kanagawa, Japan
Post Office Address: c/o Unisia Jecs Corporation
1370 Onna, Atsugi-Shi
Kanagawa-Ken 243 Japan

T.T. 10/22/1998
Date: 10/22/1998
~~20/10/1998~~

By:

Tetsu Takahashi
Tetsu Takahashi
Country of Citizenship: Japan
Residence: Kanagawa, Japan
Post Office Address: c/o Unisia Jecs Corporation
1370 Onna, Atsugi-Shi
Kanagawa-Ken 243 Japan

PTO/SB/ 96 (10/92)

CERTIFICATE UNDER 37 CFR 3.73(b)Applicant: Satoshi Kono et al.Application No.: 08/629,547 Filed: April 9, 1996Entitled: FLYWHEEL ASSEMBLY FOR INTERNAL COMBUSTION ENGINE (as revised)UNISIA JECS CORPORATION, a Corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of either:

A. [] An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

B. [X] A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. From: the inventors To: Atsugi Unisia CorporationThe document was recorded in the Patent and Trademark Office at
Reel 5331, Frame 0201, or for which a copy thereof is attached.2. From: Atsugi Unisia Corporation To: Unisia Jecs CorporationThe document was recorded in the Patent and Trademark Office at
Reel 7967, Frame 0627, or for which a copy thereof is attached.

3. From: _____ To: _____

The document was recorded in the Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

[] Additional documents in the chain of title are listed on a supplemental sheet.

[X] Copies of assignments or other documents in the chain of title are attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

10/20/1998

Date

Yoji Ito

Signature

Yoji Ito

Typed or printed name

General Manager, Intellectual

Title

Property Dept.

ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, the undersigned,

Satoshi Kono, Shizuaki Hidaka and Tetsu Takahashi

Inventor(s)
full name(s)

hereby sell, assign and transfer to

ATSUGI UNISIA CORPORATION of 1370, Onna, Atsugi-shi,

Assignee
Name and
Address

Kanagawa-ken, Japan

(hereinafter called the Assignee) the entire right, title, and interest in and to any and all improvements which are disclosed in the application for United States Letters Patent entitled

CRANKSHAFT ASSEMBLY FOR INTERNAL COMBUSTION ENGINE

Title of
Invention

which application was

Complete
either
(a) or (b)

(a) executed by the undersigned on the 16th day of May, 1990

(b) filed on the 27th day of February, 1990, Serial No. 485,659

including any and all United States Letters Patents which may be granted therefor and any and all extensions, divisions, reissues, substitutes, renewals or continuations thereof, and the right to all benefits under the International Convention for the Protection of Industrial Property.

It is hereby authorized and requested that the Commissioner of Patents issue any and all of said Letters Patent, when granted, to said Assignee.

Further, it is agreed that, when requested, without charge to but at the expense of said Assignee, the undersigned will execute all divisional, continuing, substitute, renewal, and reissue patent applications; execute all rightful other papers; and generally do everything possible which said Assignee shall consider desirable for aiding in securing and maintaining proper patent protection.

Signed at Kanagawa-ken, Japan

Date

this 16th day of May, 1990

INVENTOR(S):

Inventor(s)
full
signature(s)

Satoshi Kono

Satoshi Kono

Shizuaki Hidaka

Shizuaki Hidaka

Tetsu Takahashi



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SEPTEMBER 02, 1996

PTAS



100208327A

MARKS & MURASE, L.L.P.
RONALD P. KANANEN, ESQ.
2001 L ST., NW
SUITE 750
WASHINGTON, DC 20036

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231.

RECORDATION DATE: 05/31/1996

REEL/FRAME: 7967/0627
NUMBER OF PAGES: 6

BRIEF: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

ATSUGI UNISIA CORPORATION

DOC DATE: 03/01/1993

ASSIGNEE:

UNISIA JECS CORPORATION
1370 ONNA, ATSUGI-SHI
KANAGAWA-KEN, JAPAN

SERIAL NUMBER: 08629547
PATENT NUMBER:

FILING DATE: 04/09/1996
ISSUE DATE:

DOROTHY RILEY, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

ATS-032/CON/REISSUE

31 113

Ub-11-1996

140

RECORD



100208327

Patent and Trademark Office
U.S. DEPARTMENT OF COMMERCE

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies)

ATSUGI UNISIA CORPORATION

Additional name(s) of conveying party(ies) attached ☐ Yes ☒ No

3. Nature of conveyance:

☐ Assignment☐ Merger☐ Security Agreement☒ Change of Name☐ Other _____

Execution Date: March 1, 1993

2. Name and address of receiving party(ies)

Name: UNISIA JECS CORPORATION

Internal
Address:

Street 1370 Onna, Atsugi-shi

Address:

City: Kanagawa-ken Country: JAPAN

Additional name(s) & address(es) attached ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If the document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s) 08/629,547

Additional numbers attached Yes No ☒ X

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Ronald P. Kananen, Esq.

Internal Address: Marks & Murase, L.L.P.
Suite 750

Street Address: 2001 L Street, N.W.

City: Washington State: D.C. Zip: 20036

6. Total number of applications and patents involved:..... 1

7. Total fee (37 CFR 3.41)..... \$ 40.00

☒ Enclosed☐ Authorized to be charged to deposit account

8. Deposit account number: 23-0978

(Attach duplicate copy of this page if paying by deposit account)

9. Statement and signature:

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

RONALD P. KANANEN

Name of Person Signing

Signature

May 31, 1996

Date

Total number of pages comprising cover sheet 1

DECLARATION

I, TAKASHI JONO of 8-17, Ginza 2-chome, Chuo-ku, Tokyo, Japan
do hereby solemnly and sincerely declare:

1. That I am well acquainted with the Japanese and English
languages, and
2. That the attached document: Certified Copy of the Excerpt of
Commercial Registry of UNISIA JECS CORPORATION is a true
translation into the English language.

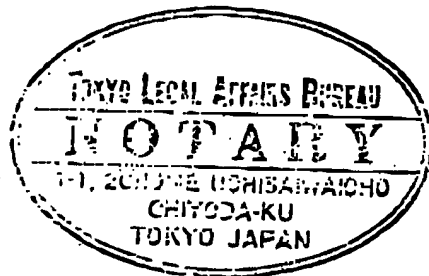
And I make this solemn declaration conscientiously believing the same
to be true and correct.


Takashi Jono

This document was subscribed before me

by the above-named person(s) on this day

APR 9 1996




(Notary Public) -



RYOJI IMAI
NOTARY

NO. 1-1, 2-CHOME UCHISAIWAICHO
CHIYODAKU TOKYO JAPAN

**TRANSLATION OF
A CERTIFIED COPY OF EXTRACT OF COMMERCIAL REGISTRY**

1. Trade Name: **UNISIA JECS CORPORATION**
1. Head Office: **1370 Onna, Atsugi-shi, Kanagawa-ken, Japan**
1. Address and name of Representative Director:
- (Address) **18-15, Hyogozuka 1-chome, Utsunomiya-shi,
Tochigi-ken, Japan**
- (Name) **Kouichrou Touda**
1. Matter re Change of Trade Name
- (from) **ATSUGI UNISIA CORPORATION**
- (to) **UNISIA JECS CORPORATION**
- Date of Change: **March 1, 1993**
- Date of Registration: **March 1, 1993**

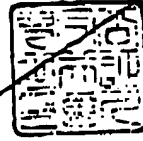
The above is a true copy of the excerpt of the Commercial Registry.

**Dated April 8, 1996
Atsugi Branch of
Yokohama District Legal Affairs Bureau
Registrar: Masao Zama (Seal)**

平成 8 年 登 録 第 595 号

認 証

囑託人 城野 喬 は、本公証人の面前で、別添文書に
署名した。



よつて、これを認証する。

平成 8 年 4 月 9 日、本公証人役場において
東京都千代田区内幸町 2 丁目 1 番 1 号 霞ヶ関公証役場

東京法務局所属

公証人

今井良児



証 明

上記署名は、東京法務局所属公証人の署名に相違ないものであ
り、かつ、その押印は、真実のものであることを証明する。

平成 8 年 4 月 9 日

東京法務局長

平本喜祿



CERTIFICATE

This is to certify that the signature affixed above has been provided
by Notary, duly authorized by the Tokyo Legal Affairs Bureau and that
the Official Seal appearing on the same is genuine.

Date APR 9 1996

Notary HIRAMOTO
Director of the Tokyo Legal Affairs Bureau

APOSTILLE

(Convention de La Haye du 5 octobre 1961)

1. Country: **JAPAN**

This public document

2. has been signed by **Nobuyoshi HIRANOTO**3. acting in the capacity of **Director of the Tokyo Legal Affairs Bureau**

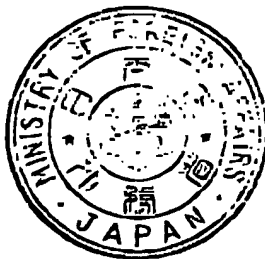
4. bears the seal/stamp of

Certified

5. at **Tokyo**6. **APR 9 1996**7. by the **Ministry of Foreign Affairs**8. **96 - No 001124**

9. Seal/stamp:

10. Signature:

**Takeo SAITO****For the Minister for Foreign Affairs**

登記簿抄本

1. 商 号 株式会社 ユニシアジェックス

1. 本 店 神奈川県厚木市恩名1370番地

1. 代表取締役の 栃木県宇都宮市兵庫塚1丁目18番15号

住所氏名 任 田 晃 一 郎

1. 商 号 ~~株式会社アサキユニシア~~

株式会社ユニシアジェックス

平成5年3月1日 変更

平成5年3月1日 登記

上記は登記簿の抄本である。

平成8年4月 8日

横浜地方法務局厚木支局

登記官 座間 正雄



**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.